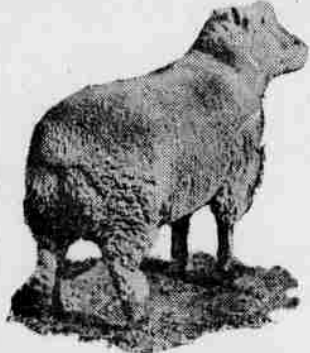


SUMMER CARE OF SHEEP AND LAMBS

The greatest point in the prevention of the maggot fly is to keep the ewes and lambs well docked and clean behind, writes W. R. Gilbert in the National Stockman. The shepherd should be armed with a pair of shears when he makes his rounds and any sheep that are inclined to scour a little or any that are wet and dirty behind should be caught and all the dirt clipped off. Otherwise the fly will strike there more readily than anywhere else. When struck by the fly the ewes, more especially the lambs, will hold their heads down, continually wagging their tails and endeavoring to bite the place affected, and if not attended to will pull off all the wool. When badly bitten they will lie behind a bush away from the rest of the flock in great torture, or as far under a hedge as possible out of the sun.

When found they should at once be taken to some sheltered place and



The Southdown is the generally accepted type of the mutton and short wool sheep. The breed takes its name from the downs that line the southern coast of England. Its smooth, even body, its round, clean barrel, its short legs, its fine head and broad saddle make it profitable to breeder and farmer. Southdown mutton has long been valued highly, both abroad and in America. The ewer shown is a pure bred Southdown.

washed with either cold spring water or with water as hot as the patient can bear it without scalding. Personally I prefer the hot water, just as hot as I can bear it on the back of my hand. After the wool has dried a little apply a few drops of spirits of turpentine into the wool to prevent the flies again striking the same place, which they will do if not stopped in time. If not badly bitten the sheep will be all right in the course of a few days, but care should be taken to examine it thoroughly and see that it is perfectly free from maggots.

Maggots when they once begin always make uphill and will increase at an enormous rate if not attended to. I have seen sheep that have been missed one day in bad shape the next morning, enduring horrible torture, with most of the wool pulled off. But this occurs only where there is bad shepherding, and a flock in the care of an experienced man will very seldom come to this state.

HAND RAISED FOALS.

Methods of Caring For the Motherless Youngsters.

In case the mare dies or has no milk the foal may be raised on cow's milk if the attendant conducts the work patiently and intelligently, writes A. S. Alexander of Wisconsin experiment station. Choose the milk of a cow that has recently calved, preferably one which gives milk low in butter fat, for mare's milk while rich in sugar is poor in fat. Sweeten the milk with molasses or sugar and dilute with warm water. Give a little of this prepared milk at short intervals from a scalded nursing bottle and large rubber nipple. Be careful to keep the bottle and nipple scrupulously clean. Add an ounce of lime water to each pint of the prepared milk and allow half a cupful once an hour at first.

Until the bowels move freely give rectal injections night and morning. If the foal scours at any time give two to four tablespoonfuls of a mixture of sweet oil and pure castor oil shaken up in milk and stop feeding milk for two or three meals, allowing sweetened warm water and lime water instead. Let the foal lick oatmeal as soon as it will eat, and gradually increase the amount and add wheat bran. In five or six weeks some sweet skim milk may be given and the amount gradually increased daily until in three months or so it may be given freely three times a day in place of new milk. The foal at this age also will be eating freely of grass, grain and bran.

Handling the Cow.

The fact that a dairy cow is pure bred is not the only essential or indication of a profitable cow. If a cow is pure bred there is a greater chance for her being a heavier milker than if not pure bred. However, breeding is only an indication that the cow may be profitable and that her offspring may be worth more money in the dairy than the offspring of a scrub or grade cow. A well bred cow, capable of converting her feed into milk, is, as a matter of fact, the first essential in the building up of the dairy. Good feeding, good shelter and proper methods of handling are other essentials which cannot be offset by any other quality, not even good breeding.

A failure of \$16,000,000 gives fur-

ther evidence of the modernization of

"PORK BARREL" ROAD BUILDING.

When enthusiastic advocates of good roads from all parts of the country meet in convention it is inevitable that a number of ill considered plans should be proposed, plans that would do far more harm than good to the cause.

One of these is the proposition that the federal government should vote an indefinite number of millions for the work and place the money in the hands of the local authorities. That simply means dividing it among the constituencies that have returned congressmen with a pull. It is the old rivers and harbors plan, which has wasted more millions of public money than would suffice to build a road from Detroit to New Orleans and keep it in repair for twenty years, not to speak of laying out a grassy boulevard strip and a footwalk on either side of it. This money has been deliberately shoveled into little harbors that were never heard of before and that which never sheltered anything bluffer than a tug or a fishing boat.—Better Roads.

P. O. DEPARTMENT AND GOOD ROADS.

It Directs Co-operation With Authorities For Improvement.

Good roads movements throughout the country are to have substantial support from the postoffice department.

First Assistant Postmaster General Roper has notified officially postmasters of all classes that "it is the desire of the department that they co-operate with state and county authorities in the endeavor to improve the condition of the public roads."

"The department's attention," continues Mr. Roper, "has been attracted to proclamations issued from time to time by the governors of states designating certain days as good roads days, and postmasters, as representatives in their communities of the national government, are expected to manifest as active an interest in this movement as is consistent with the proper performance of their official duties."

COST OF DRAGGING ROADS.

C. F. Chase of North Dakota Agricultural College Gives Estimates. At the home farm in southeastern Nebraska, writes Professor Chase, there is a stretch of road a half mile in length that we have dragged for seven



DRAGGING A COUNTRY ROAD.

years. Only once during this period has this road been worked with anything but the drag. Two years ago the side ditches were cleaned with the common road grader.

A careful record of the time taken to keep this road dragged has been kept, and for the first five years it runs as follows:

Two trips for one man and one team requiring one hour's time for one dragging is the basis taken. The first year we dragged it fifteen times, the second thirteen, the third seventeen, the fourth twelve and the fifth fourteen times, or seventy-one draggings of one hour's time during five years. This at 50 cents an hour for man and team is \$42.50 a year for the half mile. For a mile it would be \$85.20 annual cost of maintenance. Another road in the immediate vicinity cost less than \$10 per mile annually. The soil is not quite as heavy as Red river soil, but the rainfall is a little more than thirty inches. A case is noted in Public Roads Bulletin 48, United States department of agriculture, where the cost of similar maintenance of roads in Arkansas was \$11 per mile. State Engineer Gerhart of Kansas puts the range of cost for dragging at from \$4 to \$10.

The cost for North Dakota should not be over \$10 per mile, while in most cases it would be much less, the cost depending upon the character of the soil, the rainfall, traffic and grade. As an average for all dirt roads I would place the annual cost of maintenance at \$7.50 per mile or \$400,740 to drag in a satisfactory manner the roads in North Dakota one year.

The total expenditure on public roads of North Dakota outside of towns in 1911 was \$291,540. If properly organized and if the people were educated we could properly maintain our earth road with present road fund and have \$230,800 left for bridges, new construction, etc.

COLORING COPPER.

Process For Producing a Wide Range of Shades by Oxidization.

Copper and brass lend themselves readily to a coloring process and may be worked to all shades imaginable, excepting the lighter shades, which are lost on a copper surface, as that metal cannot be given a tint lighter than its natural color, says a correspondent of the Sheet Metal Shop. Zinc colors fairly well sometimes through a narrow range, while tin is a hard metal to handle as regards oxide colors.

Copper can be carried through the entire range of shades, from a very light copper color to the darkest brown or even black, by merely oxidizing the surface of the metal. Make a paste of iron oxide and graphite with wood alcohol or with plain water and apply this to the article, which is then heated in an oven or over a gas flame. It is better to use alcohol, as it dries out much quicker. The color obtained will depend on the amount of iron oxide mixed with the graphite and the length of time the heat is maintained. The more oxide in the coating the darker the shade given to the copper.

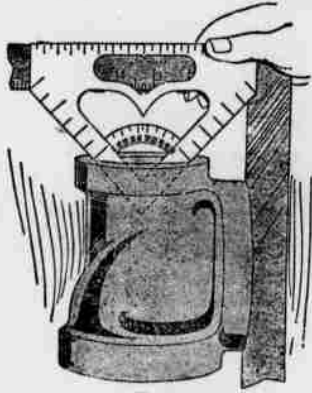
The remains of the coating should be removed with a brush or cloth moistened in alcohol, and when the surface has become quite clean the color should be protected by applying varnish, lacquer or pure wax, which may be laid on with a brush while the copper is heated. Some brown colors are obtained by using a mixture of verdigris, sal ammoniac and vinegar, using two or three times as much verdigris and sal ammoniac as vinegar. The heat treatment is the same as in the previously related process, and the color obtained can be made much darker by adding some blue vitriol to the solution.

A red brown may be given by using a vinegar paste containing equal parts of verdigris and cinnabar, together with two and a half times as much each of sal ammoniac and alum. The heat treatment is the same as for the other coatings.

FINDS PIPE CENTERS.

Convenient Device Determines the Measurement of Tubes.

A handy device, known as a center finder, designed to determine the center measurement of pipe fittings, such as elbows, tees and crosses, is now being used by plumbers and steamfitters.



DETERMINES CENTER OF PIPE.

In this country, it is used with a steel square for finding the center, a pointer marking the line. This instrument, an application of which is shown in the accompanying illustration, can be used for several other purposes, among which the striking of proper angles in laying out piping is one.

Seniors Give Reception.

On Saturday evening last, the senior class gave a reception to the other students of the Normal and to the faculty. Mrs. Todd, head of the Shakespearean club of Portland, gave several selections from "Macbeth," and "Romeo and Juliet." After the program many novel little stunts were given in which all present took part.

Doughnuts That will remain moist.

Every housewife who bakes her own bread knows that if a little potato is added to the sponge, the bread will not dry out as quickly. In this recipe potato is utilized to make doughnuts that will remain moist and fresh for several days.

K C will be found to have distinct advantages over any other Baking Powder for doughnuts. K C is a double acting baking powder with which a large batch of doughnuts may be mixed and fried a few at a time. The last will be as light and nice as the first.

K C Potato Doughnuts

By Mrs. Nevada Briggs, of Baking School fame.

3/4 cups flour; 2 eggs; 1 cup sugar; 1 level teaspoonful K C Baking Powder; 1/2 teaspoonful salt; 1/2 teaspoonful mace; 1 cup cold mashed potato; 1 cup milk, or more if needed.



Sift three times, the flour, salt, spice and baking powder. Beat eggs with rotary beater, then still using rotary beater, gradually add sugar, then work in the mashed potato with a spoon and alternately add milk and flour mixture. Make a soft dough, roll into a sheet, cut into rounds, pinch a hole in the center with the finger and fry in deep fat.

Fat for frying should not be hot enough to brown the doughnut until it has risen. When the doughnut is dropped into the fat it sinks to the bottom. As soon as it comes up it should be turned and turned a number of times while cooking. This recipe is excellent as they do not take the fat in frying and will stay moist for days.

Accidents to the flesh will happen, no matter how careful you are.

Ballard's SNOW LINIMENT

Kept always in the house is a guarantee of prompt treatment whenever there is a cut, burn, bruise or other injury to the flesh of any member of the family. The sooner these wounds are treated, the greater certainty that they will heal without much pain or loss of time. It is equally certain that the torture of rheumatism, neuralgia and sciatica, lamina back, stiff neck and lumbago will be eased, and the disease speedily driven out of the body. If you have it on hand the suffering is short and the cure is speedy and complete.

Price 25c, 50c and \$1.00 per Bottle.

James F. Ballard, Prop. St. Louis, Mo.

Stephens Eye Salve Cures Sore Eyes.

SOLD BY CONRAD STAFRIN.

THE NEW TREATMENT

—of—

ENLARGED TONSILS, ADENOID TUMORS, DEAFNESS, CATARRH, ASTHMA, BRONCHITIS

and other

LUNG DISEASES

as used by

Dr. Toel

The Chicago Specialist

Now in Dallas to Introduce His

Physiological Method.

Catarrh is a chronic disease of the nasal cavity caused by germs that have infected the mucous membrane of the nose and postnasal space.

In some of these cases there is a constant discharge of mucus; in others there is pus-discharge; while in other yet there is a swelling of the mucous membrane over the turbinated bones of the nose which makes it impossible to breathe through the afflicted nostril.

The routine treatment as applied by most physicians consists of sprays and douches. These of course clean the nasal passage, but the germs being in the glands of the mucous membrane can not be reached by it and are not killed. The catarrh continues.

In the physiologic treatment as used by Dr. Toel electrodes are introduced into the nose connected with currents of five hundred thousand volts. These currents cause only a little warmth and a slight prickling sensation, but they generate an enormous amount of ozone which kills the germs in the mucous membrane. In those cases of catarrh where there is swelling and thickening of the mucous membrane Dr. Toel either shrinks this with the high voltage current or where the bones itself in the interior of the nose are afflicted he performs an electric operation with the low voltage current which permits him to destroy without the loss of any blood and with none or scarcely any pain as much of the diseased mucous membrane and bone as may be necessary to allow the patient to breathe properly through his nose again.

In enlarged tonsils Dr. Toel either removes the entire diseased tonsil without any loss of blood in a few minutes with the electric loop operation, or he attacks the diseased spots in the tonsils with the low voltage current and thus brings the tonsil to shrinkage. Sometimes he uses the high voltage current for this. All these operations are bloodless and cause very little pain. They are also free of the danger of blood poisoning as the blood vessels and lymphatic vessels are securely closed up by the very operation.

In enlarged tonsils Dr. Toel either removes the entire diseased tonsil without any loss of blood in a few minutes with the electric loop operation, or he attacks the diseased spots in the tonsils with the low voltage current and thus brings the tonsil to shrinkage. Sometimes he uses the high voltage current for this. All these operations are bloodless and cause very little pain. They are also free of the danger of blood poisoning as the blood vessels and lymphatic vessels are securely closed up by the very operation.

Hills Bros.

TEA and COFFEE

FOR SALE AT

Loughary Grocery

DALLAS, OREGON

Clean Milk Pure Milk

IS

Guthrie Dairy Milk

IN

Sterilized Bottles

Telephone 14x7 Today

DALLAS WAREHOUSE AND MFG. CO.

(Successors to Barham Bros.) for

All Kinds of Building Materials and Shop Work

Genasco Roofing, Shingles, Brick and Tile, Sand and Gravel, Sash, Doors and Moulding

ALL ORDERS PROMPTLY FILLED

All Kinds of Storage Famous Santa Cruz Cement

FARM LOANS

PLENTY OF MONEY LOW INTEREST RATES

5 YEARS TIME

PRIVILEGE OF PREPAYMENT

Oregon Title & Land Credit Co.

209 U. S. National Bank Building

Salem, Oregon

Have You Planned Your Outing?

A Few Timely Suggestions.

Summer Excursions East

Beach Resorts

Rose Festival

Spring and Mountain Resorts

You doubtless want to go somewhere to get away for a while from the steady grind. Let us help you.

Excursions East:

From June 1st to September 30th low round trip tickets will be sold from all points on the S. P. one way through California or via Portland.

Newport, Yaquina Bay:

For rest, pleasure or recreation and outdoor life try this old seaside outing place. The best of everything—camps, cottages, hotels—at moderate cost.

Tillamook County Beaches:

A new playground, only a short run from Portland. Mountain, forest, fishing streams or beach in endless variety and infinite charm.

Rose Festival:

From June 9 to 12 Portland will don holiday attire, and supply entertainment unique, historical and interesting. Fun on land and water you cannot afford to miss.

Springs and Mountain Resorts:

Hot springs, Mineral Springs and Mountain Resorts for fishing, hunting or "far from the madding crowds" are to be found in abundance along the Southern Pacific.

Our New Outing Booklets:

"Vacation Days," "Newport" and "Tillamook County Beaches" are just off the press, full of timely suggestions as to where and how you can best spend your vacation. They are free for the asking. Drop us a postal or call on our nearest Agent.

John M. Scott, General Passenger Agent, Portland, Oregon.

May 8-15-22.



Ask for Conkey's Free Poultry Booklet

Keep Your Fowls Free from Lice

Chicken lice cost the poultryman more money than all other items of poultry expense combined. They kill thousands of chickens every year. Prevent this loss by dusting your fowls with

Conkey's Lice Powder a combination of effective lice killing ingredients. It's quick and sure.

Kills the Lice, Doesn't Harm Chickens Its use means bigger poultry profits. Restores health and vitality to your flock. Guaranteed. Price 25c and 50c.

Conkey's Lice Liquid Sprayed about the poultry house will rid your chickens of the life-sucking mites that live in the cracks and crevices. Qt. 35c, half gal. 60c, gal. \$1.00.

Conkey's Head Lice Ointment rubbed on the heads of little chicks will quickly kill the deadly head louse without injury to the chick. Safe and sure. 10c and 25c. Your Money Back If Conkey's Lice Killing Preparations Do Not Satisfy.

